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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,158	12/22/2003	Einat Amitay	IL920030045US1	7754
7590	12/22/2010			
Stephen C. Kaufman			EXAMINER	
Intellectual Property Law Dept.			PHAM, MICHAEL	
IBM Corporation				
P.O. Box 218			ART UNIT	PAPER NUMBER
Yorktown Heights, NY 10598			2167	
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			12/22/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/743,158	AMITAY, EINAT
	Examiner	Art Unit
	MICHAEL PHAM	2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 07 November 2010.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 66-70 and 72-74 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 66-70 and 72-74 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-878)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No./Mail Date _____
- 4) Interview Summary (PTO-413)
Paper No./Mail Date _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/7/2010 has been entered.

Claim Status

2. Claims 66-70 and 72-74 have been examined.
3. Claims 1-65, 71, and 75 have been cancelled.

Claim Rejections - 35 USC § 112

4. Prior 112 rejections directed towards claims 71 and 75 are withdrawn due to cancellation.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claim 66-70, and 72-73 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6571239 by Cole et. al. (hereafter Cole) further in view of U.S. Patent Application Publication 20040078356 by Mazner et. al. (hereafter Mazner).**

Claim 66 :

Cole discloses:

“providing a document index for a collection of documents to be searched, the document index comprising terms that occur in the collection;”[See figure 1 and 2. Accordingly, providing a document index (figure 1 element 120, keyword index)for a collection of documents (figure 1 element 115, repository) to be searched (col. 3 lines 16-17, search engine matches the query against the keyword index), the document index (figure 1 element 120, keyword index) comprising terms (figure 1 element 120, keywords) that occur in the collection (col. 3 line 21, data objects associated with those keywords)]

“accepting user queries in a search engine;”[See figure 1. Accordingly, accepting user queries in a search engine (figure 1 elements 100-110 and col. 3 lines 2-3, a user interface 100 for users to input queries.)]

“responsively to the queries searching the document index with the search engine to identify documents of the collection that satisfy the queries, respectively; and”[Accordingly, responsively to the queries (col. 3 lines 2-3, query) searching the document index (figure 1 element 120, keyword index) with the search engine (figure 1 element 110, search engine) to identify documents of the collection that satisfy the queries, respectively(col. 3 line 21, data objects associated with those keywords)]

“adding the queries to the respectively identified documents as metadata.”[See col. 4 line 3 and col. 4 lines 43-45. Accordingly, “adding” (linking) “the respective queries” (col. 4 lines 43, keywords) “to the identified documents” (col. 4 line 3, linking each keyword with the object's id returned by the search engine) “as metadata” (col. 4 lines 44-45, these associations)]

Cole does not explicitly disclose “themselves”.

On the other hand, Mazner discloses "themselves" [see paragraph 0018, to aid in the location and retrieval of documents, it is usefule to both add information (e.g. search terms) to the document to enhance searching and to categorize the document into a plurality of categories. Accordingly teaching adding queries (search terms) to the respectively identified documents themselves (add information to the document) as metadata (added information)]

Both Cole and Mazner are directed towards search and retrieval of documents. Cole disclosed adding search queries as metadata in order to provide for better search. Mazner further and more explicitly disclosed that the search queries are actually added to the documents in order to enhance search. Both are directed to the same field of endeavor as applicant's invention as they both are directed to improving search methods. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Mazner's disclosure above to the disclosure of Cole for the purpose of enhancing searching and to categorize the document into a plurality of categories. Doing so clearly enhances the search.

Claim 67 :

The combination of Cole and Mazner discloses in Cole “the step of enhancing the document index to include the added queries in the document index.”[Accordingly, the step of enhancing the document index (keyword index) to include the added queries in the document index (col. 4 lines 44-45, associations are then added to the master index or the auxiliary index)]

Claim 68 :

The combination of Cole and Mazner discloses in Cole “wherein enhancing the document index further comprises including therein a frequency of occurrences of the added queries in the collection.”[See col. 4 lines 22-30. Accordingly, wherein enhancing the document index (col. 4 line 22 and line 30, deletion of keyword-object associations / new and frequent are generally kept) further comprises including therein a frequency of occurrences (col. 24-25, lowest to highest frequency) of the added queries in the collection (col. 4 line 22, keyword)]

Claim 69 :

The combination of Cole and Mazner discloses in Cole “further comprising accepting new user queries in the search engine and performing the step of searching a second time responsively to the new user queries and using the enhanced document index as the document index.”[further comprising accepting new user queries in the search engine (figure 2 element 201) and performing the step of searching a second time (figure 2) responsively to the new user queries (figure 2 element 201) and using the enhanced document index as the document index (figure 2

element 220, index keywords matched)]

Claim 70 :

The combination of Cole and Mazner discloses in Cole “further comprising the steps of:

identifying old added queries whose time stamps are older than a predefined value; and”[See figure 4 and col. 4 lines 22-39. Accordingly, identifying old added queries (old keywords) whose time stamps (date) are older than a predefined value (old and frequency)]

“removing the old added queries from the document index.”[figure 4, delete from index and See figure 4 and col. 4 lines 22-39. Accordingly, removing the old added queries (old keywords) from the document index (figure 4, delete from index)]

Claim 72 :

Cole discloses “wherein the queries comprise phrases” [col. 3 lines 60-61, single words or multi-word phrases].

Claim 73 :

Cole discloses “wherein the queries comprise natural language terminology.”[col. 3 line 6, natural language]

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claim 74 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6571239 by Cole et. al. (hereafter Cole) and U.S. Patent Application Publication 20040078356 by Mazner et. al. (hereafter Mazner) further in view of U.S. Patent Application Publication 20040261021 by Mittal et. al. (hereafter Mittal).**

Claim 74 :

Cole and Mazner do not explicitly discloses “wherein a language of the queries differs from a language of the identified documents.”

Mittle discloses in the abstract queries can be expressed using character sets and/or languages that are different from the character set and/or language of at least some of the data that is to be searched. Accordingly, wherein a language of the queries (queries can be expressed using character sets and/or languages) differs (different) from a language of the identified documents (from the character set and/or language of at least some of the data that is to be searched).

Cole, Mazner, and Mittal are all directed towards document search and therefore all are within the same field of endeavor as applicant's invention. It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have applied Mittal's

disclosure above to the combination of Cole and Mazner for the purpose of allowing various devices to utilize the benefits of the search indices. Devices such as mobile phones would be too tedious for query entry, and further typing in different languages using ASCII keyboard also would be tedious and slow see 0006 and 0018 of Mittal. Accordingly, by allowing different languages to be entered in as queries, it allows for an improvement in the over all search process.

Response to Arguments

9. Applicant's arguments with respect to claims 66-70 and 72-74 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record listed on pto-892 and not relied, if any, upon is considered pertinent to applicant's disclosure.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL PHAM whose telephone number is (571)272-3924. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. P./
Examiner, Art Unit 2167

/Cam Y Truong/
Primary Examiner, Art Unit 2169